REMARKS

Claims 17-19, 27, 28, and 46 have been amended to correct typographical errors as noted in the Office Action and otherwise.

Claims 46 has also been amended to improve antecedent basis.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached page is captioned "Version with Markings to Show Changes Made."

Objection to Claims

Claims 19 and 46 stand objected to for noted informalities. The Office Action accurately points out typographical or clerical errors and assumes the appropriate corrections which have been implemented with this paper.

The 35 U.S.C. § 103 Rejection

According to M.P.E.P. § 2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claims 1-6, 17, and 29-33 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Troxel et al.* (US 6,253,236 B1) and in further view of *Sales et al.* (US 6,314,408 B1). Claims 7-12 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Troxel* in view of *Sales* and further in view of *Rai et al.* (US 6,377,982 B1). Claims 19-22, 27, and 34-37 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Troxel* in view of *Sales* and further in view of *Armstrong* (US 5,542,047). These rejections are respectfully traversed.

Generally, the Office Action states that *Troxel* discloses or suggests the fundamental method and apparatus and that *Sales*, *Rai*, and *Armstrong* disclose or suggest various details missing from *Troxel*. The analysis and application of *Troxel* and *Sales* with respect to the rejection of claim 1 is exemplary of all of the above rejections.

Specifically, the Office Action states that "Troxel teaches a server of a data communications network keeping a count of the sessions used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belonging to said group (col. 5, lines 20-41)." This is essentially a quote of the preamble of claim 1. It is worth noting that the citation makes no reference to abnormal disconnections and therefore does not fully support the contention put forth. The Office Action then goes on to say that Troxel fails to disclose the elements in the body of the claim which are disclosed by Sales. For discussion purposes, it will be assumed initially that Sales discloses what is alleged. If one were to characterize the preamble as embodying the end that one wishes to achieve and the body as embodying the means to achieving that end, then essentially the Office Action contends that Troxel discloses the end and Sales discloses the means to that end. However, what the Office Action ignores is the fact that Troxel discloses his own means to that end. This creates problems for the rejection which can not be overcome.

An important question that is not fully addressed is what form the combination of the references will take. Assume first that the means of *Troxel* and the means of *Sales* are supposed to be combined. There is no showing that the two means are compatible with one another. If the two means are compatible, then there would be at least some redundancy created by their combination. Assume instead that the means of *Troxel* is replaced by the means of *Sales*. This would substantially change the principle of operation of *Troxel* which is improper.

Another question that is improperly addressed is the motivation for combining the references in whatever form. The Office Action states that the combination would be motivated to "provide more functionality for the administering of the server." This however is circular and only essentially restates the result that one wants to achieve, that is, a more functional server has

more functionality. In any case, the stated motivation only supports the result and not the combination to achieve that result. Motivating the result alone is not sufficient in the case of this rejection. It is important to note that *Troxel* would contend that he already achieves this result. He just uses a different means. Consequently, proper motivation would be directed to convincing *Troxel* to alter his means. However, the proposed combination would render the means of *Troxel* either redundant or obsolete. It follows then that *Troxel* is not likely to support such a combination and would most probably be opposed to it. *Salas* is silent as to the combination. This leaves no motivation or improper hindsight motivation. In either case, without motivation the rejection is improper.

Returning to the assumption that Sales discloses what is alleged in the Office Action, close inspection proves that the assumption is false. There are two citations given with the first citation being used twice. The first citation fails to distinguish "logged in" users as claimed from any and all users. The second citation fails to "clear" as claimed an erroneous entry in favor of the new user's entry. Thus, the citations fail to support the contention put forth.

Turning to the *Rai* reference with respect to claim 7 as an example, the Office Action states that *Rai* discloses the existence of port and NAS identifications. The Office Action then concludes that it would have been obvious to use these identifications to form a unique id for each user. However these two statements do not logically follow. *Rai* discloses nothing about utilizing these identifications individually or in combination as "unique identification values" for any user whether logged in or not. The rejection conclusion is pure hindsight reconstruction.

Claims 13, 18, and 38 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Waldo et al.* (US 6,243,716 B1) in further view of *Sales*. Claims 14 and 39-41 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Waldo* in view of *Sales* and in further view of *Troxel*. Claims 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Waldo* in view of *Sales* and in further view of *Rai* and *Troxel*. Claims 23-25, 28, and 42-45 stand rejected under 35 U.S.C. § 103(a) as being allegedly

unpatentable over *Waldo* in view of *Sales* and in further view of *Armstrong*. Claim 26 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Waldo* in view of *Sales* and *Armstrong* and in further view of *Troxel*. These rejections are respectfully traversed.

Generally, the Office Action states that Waldo discloses or suggests the fundamental method and apparatus and that Sales, Rai, Troxel, and Armstrong disclose or suggest various details missing from Waldo. The analysis and application of Waldo with respect to the rejection of claim 13 is exemplary of all of the above corresponding rejections. The analysis and application of Sales, Rai, and Armstrong are the same with respect to all of the above corresponding rejections whether in combination with Waldo or Troxel. In fact, Waldo is used in a parallel manner to Troxel above, that is, Waldo discloses the end and his own means to that end but the means of Waldo is ignored in favor of Sales. As a result all of the arguments presented above apply equally here with Waldo substituted for Troxel. The addition of Troxel to Waldo only further compounds the problems.

Claims 46-49 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Armstrong* in view of *Sales* and *Troxel*. Claim 50 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Armstrong* in view of *Sales* and *Troxel* and in further view of *Rai*. These rejections are respectfully traversed.

Generally, the Office Action states that Armstrong, Sales, Troxel, and Rai disclose or suggest various of the claim elements. However, most if not all of the arguments presented above apply equally here.

In view of the above, it is respectfully asserted that the cited prior art fails to render the present claims obvious and thus they are now in condition for allowance.

CISCO-1372

Request for Allowance

In view of the foregoing, reconsideration and an early allowance of this application are earnestly solicited.

If any matters remain which could be resolved in a telephone interview between the Examiner and the undersigned, the Examiner is invited to call the undersigned to expedite resolution of any such matters.

Respectfully submitted,

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Dated: July <u>13</u>, 2002

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 17-19, 27, 28, and 46 have been amended as follows:

17. (Amended Once) A program storage device readable by a machine, [tangidly] tangibly embodying a program of instructions executable by the machine to perform a method for a Max Sessions Server (MSS) of a data communications network keeping a count of the sessions used at a given time by a group of users to correct said count to compensate for abnormal disconnection of users belonging to said group, said method comprising:

assigning unique identification values(UIVs) to each user logged in at a port of a network access server (NAS);

maintaining a master list of UIVs associated with logged in users and their respective group identification information;

responding to a new user's attempt to log in to the data communications network by checking to see if the UIV of the new user is already in the master list, and if it is, clearing the entry in the master list and entering the new user's UIV and group identification information in the master list.

18. (Amended Once) A program storage device readable by a machine, [tangidly] tangibly embodying a program of instructions executable by the machine to perform a method for a Resource Control Server (RCS) of a data communications network keeping a count of a particular resource used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belonging to said group, said method comprising:

assigning unique identification values (UIVs) to each user logged in at a port of a network access server (NAS);

maintaining a master list of UIVs associated with logged in users and their respective group identification information;

responding to a new user's attempt to log in to the data communications network by checking to see if the UIV of the new user is already in the master list, and if it is, clearing the entry in the master list and entering the new user's UIV and group identification information in the master list.

19. (Amended Once) A method for a Max Sessions Server (MSS) of a data communications network keeping a [county] count of the sessions used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belonging to said group, said method comprising:

assigning unique [identifications] <u>identification</u> values (UIVs) to each [used] <u>user</u> logged in at a port of a network access server (NAS);

maintaining a master list of UIVs associated with logged in users and their respective group identification information;

responding to the non-operational status of a NAS by removing all UIVs associated with the non-operational NAS from said master list and decrementing the count of the sessions used by the number of UIVs removed from said master list.

27. (Amended Once) A program storage device readable by a machine, [tangidly] tangibly embodying a program of instructions executable by the machine to perform a method for a Max Sessions Server (MSS) of a data communications network keeping a count of the

sessions used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belonging to said group, said method comprising:

assigning unique identifications values (UIVs) to each used logged in at a port of a network access server (NAS);

maintaining a master list of UIVs associated with logged in users and their respective group identification information;

periodically checking a NAS to determine if it has become non-operational; responding to the non-operational status of a NAS by removing all UIVs associated with

the non-operational NAS from said master list and decrementing the count of the sessions used

by the number of UIVs removed from said master list.

28. (Amended Once) A program storage device readable by a machine, [tangidly] tangibly embodying a program of instruction executable by the machine to perform a method for a Resource Control Server (RCS) of a data communications network keeping a count of a particular resource used at a given time by a group of users to correct said count to compensate for abnormal disconnections of users belong to said group, said method comprising:

assigning unique identifications values (UIVs) to each used logged in at a port of a network access server (NAS);

maintaining a master list of UIVs associated with logged in users and their respective group identification information;

periodically checking a NAS to determine if it has become non-operational;

responding to the non-operational status of a NAS by removing all UIVs associated with the non-operational NAS from said master list and decrementing the count of the particular resource used by the number of UIVs removed from said master list.

46. (Amended Once) A method for a Max Sessions Server (MSS) to detect hardware or communication failures at a [NAS] Network Assess Server (NAS) or at a particular port on [an] said NAS, said method comprising:

maintaining a master list of unique identification numbers associated with each logged in user;

responding to a user's attempt to log into the data communications network by checking to see if the unique identification number associated with the <u>user</u> is already on the master list;

removing the unique identification number from the master list if said unique identification number already appears on the <u>master</u> list;

decrementing [the] corresponding MSS counter(s) by one if said unique identification number is already on the master list[.];

[having an associated AAA (Authentication, Authorization, and Accounting) server automatically checking on a periodic time basis to determine if the said NAS has failed to communicate, said AAA notifying MSS if said the NAS does fail to communicate;]

receiving notification from an associated Authentication, Authorization, and Accounting

(AAA) server when said NAS fails a communications check performed by the AAA server;

removing all said unique identification numbers associated with said NAS from the master list if said NAS fails [to communicate within said time limit] said communications check; and

decrementing the MSS counters by the total number of lost connections on said NAS if said NAS fails [to communicate within said time limit] said communications check.